



# CT3

## Audio Input Selector Switch

### DESCRIPTION

CT3 is a high quality Audio Input Selector Switch.

It is based on the same high precision, Swiss made switching mechanism as the DACT CT1 and CT2 audio attenuators.

CT3 is a non-shorting type of switch making sure neither of the input sources will be short-circuiting each other when the switch is operated.

CT3 switches two channels simultaneously. For both channels, it switches signal AND ground. This is an effective way to minimize the risk of creating ground loops.

### TYPICAL APPLICATIONS

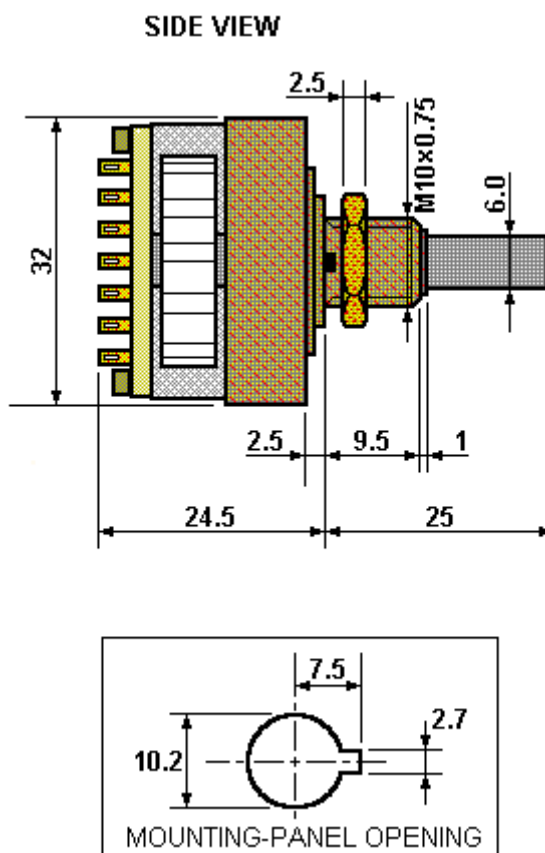
- Input selector in Do-It-Yourself Hi-Fi / audio projects
- Input selector switch in active or passive preamplifiers
- Selector switch in professional audio equipment
- Switch for long lifetime applications
- Test equipment selector switch



### FEATURES

- 4-pole switch (switches signal and ground on two channels simultaneously)
- Gold plated contacts for long lifetime even in hot and humid environments
- High reliability
- Matches perfectly with DACT CT1 and CT2 audio attenuators
- "Programmable" for 1 to 5 positions

### OUTLINE DRAWING AND DIMENSIONS (mm)



## SPECIFICATIONS

### MAXIMUM RATINGS

Note	Parameter	(conditions / comments)	Value	Unit
1	Switching capacity	(resistive load)	2V/2A 24V/0.6A 42V/0.4A	AC/DC
1	Operating ambient temp. range		-25 to +70	deg.C
1	Storage temperature range		-40 to +85	deg.C
2	Test voltage	(contact to contact) (contact to earth)	1000 1000	V

### MECHANICAL CHARACTERISTICS

Note	Parameter	(conditions / comments)	Value	Unit
	Number of positions	(mechanical setting)	1-5	
	Indexing angle		15	deg.
	Switching function		Non-shorting	
	Gold plating, contacts	(hard-gold)	3	um
	Gold plating, wiper	(hard-gold)	8	um
3	Mechanical life		> 25,000	cycles
	Switching torque		9	Ncm
	Nut tightening torque		Max. 300	Ncm

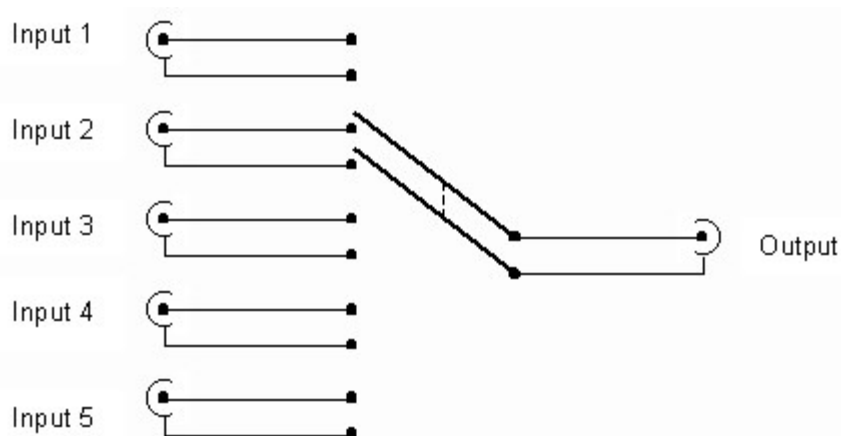
### DC ELECTRICAL CHARACTERISTICS

Note	Parameter	(conditions / comments)	Value	Unit
4	Insulation resistance	(contact to contact) (contact to earth)	> $10^{13}$ > $10^{12}$	ohm
	Contact resistance	(new)	Max. 0.01	ohm
	Contact capacitance	(adjacent contacts)	1	pF

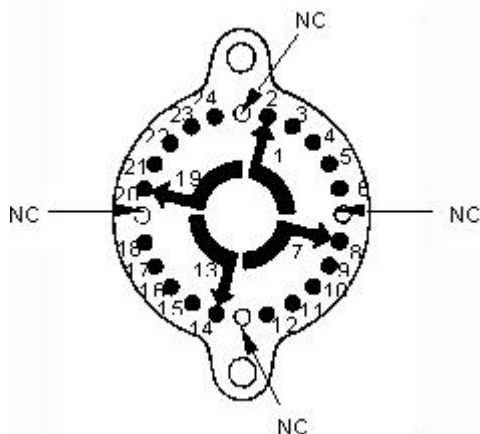
#### Notes

- 1 Exposure to maximum rating conditions for extended periods of time may affect device reliability.
- 2 Rms voltage, 50 Hz, 60% relative humidity, applied for 1 minute.
- 3 One cycle is defined as a full rotation from one end stop to the other and return.
- 4 Measured with 500 VDC for 1 minute.

### PRINCIPLES OF OPERATION



## CONNECTIONS



Pin no.	Connection
1	Output, channel 1, signal
2	Input, channel 1, signal, source 1
3	Input, channel 1, signal, source 2
4	Input, channel 1, signal, source 3
5	Input, channel 1, signal, source 4
6	Input, channel 1, signal, source 5
7	Output, channel 1, ground
8	Input, channel 1, ground, source 1
9	Input, channel 1, ground, source 2
10	Input, channel 1, ground, source 3
11	Input, channel 1, ground, source 4
12	Input, channel 1, ground, source 5
13	Output, channel 2, signal
14	Input, channel 2, signal, source 1
15	Input, channel 2, signal, source 2
16	Input, channel 2, signal, source 3
17	Input, channel 2, signal, source 4
18	Input, channel 2, signal, source 5
19	Output, channel 2, ground
20	Input, channel 2, ground, source 1
21	Input, channel 2, ground, source 2
22	Input, channel 2, ground, source 3
23	Input, channel 2, ground, source 4
24	Input, channel 2, ground, source 5

### ANTISTATIC CHARGES

To avoid noises from antistatic charges we suggest that one of the following two precautions is taken:

- 1 CT3 is mounted with electrical connection between its click-house and the equipment chassis.
- 2 A 1 MOhm resistor is connected between the CT3 click-house and equipment ground.

## ORDERING INFORMATION

<u>Part number</u>	<u>Description</u>
CT3-5-4/Wire	Audio input selector switch, 1-5 positions, 2 channels, switches input and ground (4 poles). With solder lugs for wires.
CT3-5-4/PCB	Audio input selector switch, 1-5 positions, 2 channels, switches input and ground (4 poles). For soldering into a PCB.
CT-knob1	Stainless steel knob for CT1, CT2 and CT3, raw steel look, 25 mm (1") diam.
CT-ext1/S	Shaft extension kit. Version with short extension shaft (200 mm = 7.87")
CT-ext1/L	Shaft extension kit. Version with long extension shaft (400 mm = 15.75")